

Date: Wed, 9 Mar 94 02:59:16 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #265  
To: Info-Hams

Info-Hams Digest                      Wed, 9 Mar 94                      Volume 94 : Issue 265

Today's Topics:

          CAN WE SELL STUFF HERE? (2 msgs)  
          FCC Regulations: Freq., Power, etc  
          FT-530 Receive Problem Followup  
          Honda ignition recall - now NOISE!!  
          Need help with GE MasterPro Repeater  
          Sound Blaster stupidity  
          Status of Online Repeater Directory Project....  
          Tracking info.

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 8 Mar 94 22:33:37 GMT  
From: nprdc!ihnp4.ucsd.edu!usc!howland.reston.ans.net!news.intercon.com!panix!  
ddsw1!news.kei.com!yeshua.marcam.com!charnel!olivea!news.bu.edu!  
dartvax.dartmouth.edu!usenet@network.ucsd.edu  
Subject: CAN WE SELL STUFF HERE?  
To: info-hams@ucsd.edu

In article <199403081720.JAA18342@ucsd.edu>  
MAYNARD@uriacc.uri.edu writes:

> Here is a real naive question, but is it ok to list ham related items for  
> sale on the LIST? Please differentiate Official Replies from Official Opinions  
> . TNX, WY2G, Brian

On the USENET, no commercial activity is allowed. That means that

you cannot post advertisements for your company, or for a product you wish to market, etc. Anything you will be making a profit on that contributes to your steady income is not allowed.

However, it is perfectly all right for people to post for sale/wanted ads on the USENET, so long as the items for sale are few in number, and your sale is infrequent. So, if you want to sell your dual band mobile unit for money to get an HF rig, that is allowed. But if you want to sell a product, like a new software program you've written, or a PC card you've designed, that is not allowed.

The appropriate newsgroup for classified advertisements in the rec.radio.\* hierarchy is rec.radio.swap.

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=====
Kenneth E. Harker  N1PVB      Dartmouth College  Amateur Packet Radio
kenneth.e.harker@dartmouth.edu  Hinman Box 1262    n1pvb@w1et.nh.usa.na
(603) 643-6549      Hanover, NH 03755  or n1pvb-5 on 144.99
=====
```

(PGP Public Key now available on request)

-----  
Date: Wed, 9 Mar 1994 05:19:42 GMT  
From: ihnp4.ucsd.edu!library.ucla.edu!news.ucdavis.edu!chip.ucdavis.edu!  
ez006683@network.ucsd.edu  
Subject: CAN WE SELL STUFF HERE?  
To: info-hams@ucsd.edu

Kenneth E. Harker (Kenneth.E.Harker@Dartmouth.Edu) wrote:  
: In article <199403081720.JAA18342@ucsd.edu>  
: MAYNARD@uriacc.uri.edu writes:

: > Here is a real naive question, but is it ok to list ham related items for  
: > sale on the LIST? Please differentiate Official Replies from Official  
Opinions  
: > . TNX, WY2G, Brian

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: you cannot post advertisements for your company, or for a product you  
: wish to market, etc. Anything you will be making a profit on that  
: contributes to your steady income is not allowed.

No offence but this is patently wrong. Commercial activity is not allowed to run along the NSF backbone which is the Internet (with a capital I). The internet (with a lowercase i) is not controlled by NSF and if your messages are not routed through NSF nodes there is no problem. Usenet is another animal altogether Usenet is run on many sifferent sites and is not the Internet. You can advertise and treat the Acceptable use Policy of the NSF much like the new Ham regs, but if you

are a .com site that is all supposed to be taken care of by your provider or systems guy. It is the responsibility of the systems administrators at NSF connected sites to keep commercial activity off. For a more thorough (and possibly more accurate) treatment of this look at news.newuser.announce (I think thats the right name).

good luck,  
Dan

--

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*-----*
* Daniel D. Todd      Packet: KC6UUD@KE6LW.#nocal.ca.usa      *
*                    Internet: ddtodd@ucdavis.edu              *
*                    Snail Mail: 1750 Hanover #102             *
*                    Davis CA 95616                           *
*-----*
* All opinions expressed herein are completely fictitious any *
* resemblance to actual opinions of persons living or dead is  *
* completely coincidental.                                     *
*-----*
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Date: 8 Mar 94 22:45:18 GMT  
From: dog.ee.lbl.gov!newshub.nosc.mil!sunspot.nosc.mil!sunspot!  
martino@ucbvax.berkeley.edu  
Subject: FCC Regulations: Freq., Power, etc  
To: info-hams@ucsd.edu

I don't usually read this group so bear with me and my ignorance on the subject. Could someone point me to the FCC document that lists the regulations (limits) on radio equipment, such as frequency bands, power, etc?. A brief summary of what the document contains would also be helpful. Please e-mail responses to the above address. If I get any requests I'll post what I receive.

Thanx in advance.

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=====  
Martin Olivera  
=====

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Date: Wed, 9 Mar 1994 08:56:05 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!gatech!wa4mei!ke4zv!  
gary@network.ucsd.edu  
Subject: FT-530 Receive Problem Followup

To: info-hams@ucsd.edu

In article <CMD8wr.4y@inmet.camb.inmet.com> leber@panther.warm.inmet.com (Thomas Leber) writes:

>OK, all of you who have been following my adventures with Yaesu, trying to  
>resolve interference heard around 145.13, here's some more info:

>Last night, I started playing with the VHF and UHF VFOs simultaneously,  
>and suddenly heard the same type of interference, but this time it  
>was full scale, and it was coming in on the UHF side. A little experimentation  
>indicated that for a given 2 meter frequency, the unit generated a spur at  
>3.172845 times that frequency. Example: 145.13 generates 460.475. The noise is  
>exactly like the weaker noise I hear in 2 meter, but it pegs the S meter.  
>I'd say it's likely that these phenomena are related. I checked the schematic  
>for crystals that oscillate around 3.1728, but didn't see any. Can any of the  
>more technically savvy of you out there suggest the culprit?

This is almost certainly internally generated intermod. It's a mixing product of the two LOs at some harmonic. That product is either in-band, or falls on the IF frequency (likely the latter). Look for  $X \cdot F1 - Y \cdot F2 = IF$  where F1 is one LO, F2 is the other, and X and Y are small integers. To do this you need to know whether the radio uses high or low side injection, and what the IF frequency is. As I recall, Yaseu doesn't use the common 10.7 MHz as the first IF.

This is a common problem with dual banders. Most will exhibit this behavior at some combination of 2 meter and 70 cm frequencies. There's no good way to fix it. The high receive sensitivity required to work with a rubber dummy load, the strong LOs, and the common IF make this type of problem almost inevitable between 2 meters and 70 cm. The only advice I can give is to not try to monitor two frequencies that are related by the intermod equation.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

-----  
Date: Wed, 9 Mar 1994 08:37:13 GMT

From: ihnp4.ucsd.edu!swrinde!gatech!wa4mei!ke4zv!gary@network.ucsd.edu

Subject: Honda ignition recall - now NOISE!!

To: info-hams@ucsd.edu

In article <CMCXL6.7Mu@armory.com> dev@armory.com (Uncle Dave) writes:

>i have an '86 Honda Accord, and get ignition noise up  
>the wazoo on my HT in the car. i've tried replacing the  
>"spec. condenser" which goes from the battery (one lead)  
>and then to the ignition coil (another lead), but this  
>didn't help a lot. it did help reduce the noise, but not  
>greatly. the local folks at HRO suggested replacing the  
>spark-plug cables. from the sounds of postings here,  
>however, it seems like the problem may be the distributor.  
>sometimes the noise is overpowering, and sometime it's  
>barely audible. no clue as to why. perhaps it's cold/hot?  
>orientation of it with the earth's magnetic field?

Honda seems to have a problem with their ignition system that's reminiscent of the problems that used to plague Fords back in the 1960s. You have to understand that a Kettering ignition is very similar to an old spark transmitter (in fact auto spark coils were often used in low power spark transmitters). So you have to take steps to suppress this hash.

There are three ways to suppress this type of noise. The first method is to bypass the noise from the low voltage wiring. To do this, you need to place capacitors (often still called "condensers" in the auto world) \*directly\* to ground from the offending interference sources. The low voltage wiring going to the ignition module should receive 0.001 uf capacitors with as near \*zero\* lead length as possible directly to frame/engine ground. "Feedthru" type capacitors are ideal for this application, but the "condensers" used in older point type ignitions can be used too, though with somewhat less effect at VHF. The key things to remember about bypassing is that you need to attach the capacitor as close to the noise source as possible, and have as direct an \*RF\* path as possible to frame ground. A 2 inch lead length is way too much and won't let the bypass do it's job properly. Note too that the distributor lower body is usually directly attached to the engine block, so it can be used as the ground point.

The second line of attack is on the high voltage side of the ignition system. The reason we get RF hash up in our bands is because of the sharp risetime of the ignition pulses. If you recall theory, a square wave is made up of an infinite number of odd harmonics, so it's a rich source of noise in the RF spectrum. The trick here is to soften the edges of the waveform so that it approaches a triangle or sine wave. You do this by using \*resistance\* in series with the circuit. Common ways are resistor plugs, resistor wiring, and special resistor inserts to the wiring. A resistor plug has a resistive element built into it's body. Champion resistor plugs have a "R" in their part number. For example, a J-10 plug does not have the resistor

element but a J-10R does. Resistance "wires" once had cotton cores that had been carbonized as their conductive element. You don't see these much anymore because modern cars have such high underhood temperatures that the "wires" deteriorate rapidly. Modern wires use other construction methods, but still maintain the principle of distributed resistance. You can check your wires with an ohmmeter. If they read near zero ohms end to end, they aren't resistor wires. A resistor insert looks like a coax adaptor fitting. It has a mating connector that goes into the distributor tower, a short bakelite body containing the resistor, and a mating connector to accept the wire. I haven't seen these around lately, but they used to be common in parts stores.

The third line of attack is shielding. In the Corvette, radio noise used to be a horrible problem. The way GM solved it was by placing the distributor and HV wiring in a monel metal "doghouse" that completely surrounded the noise sources and was attached firmly to engine/frame ground. This structure formed a Faraday cage for electrical fields, and due to the anti-magnetic properties of monel, formed a magnetic cage as well. (You have to be concerned about magnetic induction from the HV wiring to the rest of the wiring harness. Watch your wire \*routing\*, wires carrying high energy pulses should never be allowed to run parallel with other wiring.) This extreme shielding was necessary due to the plastic body of the Corvette. In a more normal car, the hood, fenders, and grille form a metallic shield about the engine compartment. (Well they used to, in today's cars the inner fenders are usually plastic, as is the grille, and the hood often isn't electrically well bonded to the frame.) Flexible copper bond straps can assure that the hood is electrically grounded. Bond straps to the exhaust system are useful as well since the exhaust system is often rubber isolated and is long enough to form an effective antenna when shock excited by sparks at the engine end. Ground bond it about halfway back, and at the far end.

Another approach to shielding is the one used on aircraft. The electrical components are shielded using wiring similar to coaxial cable. You can do this in an auto too. There used to be a fellow who advertised kits for various cars in QST. I haven't seen his ads in a while, but the kits may still be available. There is also a HV wire sold that uses a similar approach. It's copper cored and wrapped in a flat ribbon of monel metal. Or you can make your own shielded wires. If you take the shield from RG-8 and slip it over your spark plug wires, and ground it to the engine, you'll suppress most of the noise being radiated by the wires.

There are always ways to attack ignition noise. Some manufacturers do it for you, others don't do as good a job. There are also other sources of electrical noise in a car, such as electric fuel pumps, electrically driven fuel injection systems, blower and wiper motors, etc. They all will respond to bypassing or shielding. You can always do the job right

if you are determined enough, or you can just buy an American car. :-)  
(EM compatability has long been a concern of car companies with strong  
fleet sales programs to police, taxi, and other two way radio users.  
Honda brags that they don't have a fleet sales program. That should be  
a red flag to any two way radio user.)

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: Wed, 9 Mar 1994 09:03:38 GMT  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!gatech!wa4mei!ke4zv!  
gary@network.ucsd.edu  
Subject: Need help with GE MasterPro Repeater  
To: info-hams@ucsd.edu

In article <2lj28v\$mkv@coyote.rain.org> sterman@coyote.rain.org (Sterling R.  
Ellsworth) writes:

>  
>So how do I operate this thing ?  
>  
>I have the original manuals but they are beyond my level of understanding.  
>My level of understanding = 2 on a scale of 1 to 100.  
>  
>I may be in over my head here but I want to run this thing simplex (or  
>duplex, but not as a repeater) just to get started.  
>  
>Anyone have any basic pointers to get me started ?

Attach antenna and power, plug in the control head, turn on the radio  
by rotating the volume knob past the "click" and adjusting for a comfortable  
level, adjust the squelch knob until the "rushing" sound just stops. Now  
press the PTT switch on the side of the microphone and talk. Release the  
switch to listen. (These radios were designed to be operated by \*cops\*  
for heaven sakes, they can't be that complicated.)

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: Wed, 9 Mar 1994 06:27:29 GMT  
From: news.Hawaii.Edu!uhunix3.uhcc.Hawaii.Edu!jherman@ames.arpa  
Subject: Sound Blaster stupidity  
To: info-hams@ucsd.edu

In article <763139873snx@skyld.grendel.com> jangus@skyld.grendel.com (Jeffrey D. Angus) writes:

>  
>In article <CMC9EB.Kr1@news.Hawaii.Edu> jherman@uhunix3.uhcc.Hawaii.Edu writes:  
>  
> [ more grouching about the hamblaster postings ]  
>  
> > Jeff NH6IL  
>  
> Stay on 'em Jeff. If you keep it up, they might even suspect that you're  
> following them around and persecuting them.

Well then, I'll start posting my ads over here rather than on r.r.swap:

HW-202 for sale - make offer. [I guess that's okay as long as I call it an 'update'.]

So Jeff#2, still stopping traffic on the Santa Ana Freeway? Hee hee...

73,  
Jeff NH6IL

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Date: Tue, 8 Mar 1994 16:48:59 GMT  
From: hub.cs.jmu.edu!hearst.acc.Virginia.EDU!cscsun!dtiller@uunet.uu.net  
Subject: Status of Online Repeater Directory Project....  
To: info-hams@ucsd.edu

Conway Yee (yee@mipg.upenn.edu) wrote:

: In the subsequent two posts, I enclose copies of the two letters that  
: the ARRL has or will send me. The second letter has not yet been  
: received so I am unable to verify the accuracy of the email version  
: compared to the printed version but I have no reason to believe that  
: there will be any differences.

[Rest of letters deleted]

Maybe if we talk nicely to the coordination bodies and explain what's been going on we can get them to either refuse the ARRL the free (and unacknowledged) use of their data or to charge them for it. I for one



would rather see the online database than the silly paper one. I think the ARRL has been a real poop about this, and is running amok over its members. I wonder what they'd say if TMARC or SARA decided to allow Mr. Yee free access to their data, but not the ARRL??? Serves them right...

--

David Tiller | Network Administrator | Voice: (804) 752-3710 |  
dtiller@rmc.edu | Randolph-Macon College | Fax: (804) 752-7231 |  
"Drunk, [Beowulf] slew | P.O. Box 5005 | ICBM: 37d 42' 43.75" N |  
no hearth companions." | Ashland, Va 23005 | 77d 31' 32.19" W |

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Date: 8 Mar 1994 22:49:36 GMT  
From: ihnp4.ucsd.edu!library.ucla.edu!europa.eng.gtefsd.com!news.umbc.edu!eff!  
news.kei.com!ssd.intel.com!chnews!ornews.intel.com!landesk!  
bmiller@network.ucsd.edu  
Subject: Tracking info.  
To: info-hams@ucsd.edu

In article <CMCxo7.86v@inf.utfsm.cl> ce2usm@inf.utfsm.cl (Circulo de Radio Aficiionados UTFSM) writes:

>'lo all.  
>I'm working in a project tracking some satelllites.... I've been  
>using some progs (SIMTEL20 :), but now I need the info to update  
>the information about each sattelite orbit.  
>Where can I find a file with this information????  
>I hope there is a site where anyone can get this kind of data  
>'cause is very important to me to update this in order to have  
>the program working properly.  
>Please any reply to this not to news but to my presonal e-mail  
>address: rrodrigu@loa.disca.utfsm.cl  
>  
>Thanks in advance for any help.  
>  
>Rodrigo E. Rodriguez (ROD)  
>CE 6 NUG  
>rrodrigu@loa.disca.utfsm.cl

You can get the satelllite orbit information from rec.radio.info They often post orbital elements. Some are 2 line elements, and some are the other kind (whatever you call them). Your program may require a particualr input format.

I use Traksat sometimes and find it very functional. It is available via FTP from fdtp.std.com

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Brett Miller N70LQ                      E-mail: brett\_miller@ccm.hf.intel.com  
Intel Corp.  
American Fork, UT

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Date: Wed, 9 Mar 1994 06:08:21 GMT  
From: news.Hawaii.Edu!uhunix3.uhcc.Hawaii.Edu!jherman@ames.arpa  
To: info-hams@ucsd.edu

References <CMC9EB.Kr1@news.Hawaii.Edu>, <CMCruE.8n6@ucdavis.edu>,  
<2li7a8\$sj6@news.acns.nwu.edu>  
Subject : Re: Sound Blaster stupidity

In article <2li7a8\$sj6@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan)  
writes:

>In article <CMCruE.8n6@ucdavis.edu>,  
>Daniel D. Todd <ez006683@chip.ucdavis.edu> wrote:  
>>Jeffrey Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:  
>>  
>>: But keep in mind that they're NOT ads because the item is not for sale  
>>: yet (even though the price was posted for us).

I was being facetious!

>>I've seen this argument posited before, I'm not sure if it's real or  
>>not. Anyone who thinks that the non-existence of a product means that  
>>ads for it are not advertisements should look at the last couple months  
>>of QST. Lots of companies advertise before the product is actually  
>>available. (Sorta like President Clinton and the health care program)  
>  
>Indeed. I think that they are called 'Teasers' - a common marketing  
>ploy. It is used to signal prospective customers and competitors. To  
>competitors: better watch out, I am going to come out with this new product.  
>It is a 'territorial' thing. Like dogs marking the fire hydrant.  
>  
>Rajiv  
>aa9ch  
>r-dewan@nwu.edu

But Rajiv, does this mean that when h.b. is finally on the market  
it'll smell of .... of .... oh yuck!

Jeff NH6IL

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Date: Wed, 9 Mar 1994 08:12:30 +0000  
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!pipex!uknet!demon!  
g8sjp.demon.co.uk!ip@network.ucsd.edu  
To: info-hams@ucsd.edu

References <2lfg43\$pek@jericho.mc.com>, <2lhvv2\$boc@slinky.cs.nyu.edu>,  
<rcrw90-080394154104@129.188.192.107>  
Reply-To : ip@g8sjp.demon.co.uk  
Subject : Re: Testing Procedures (was: Re: Keyboards at testing sessions)

In article <rcrw90-080394154104@129.188.192.107>  
rcrw90@email.mot.com "Mike Waters" writes:

> Note that many VE teams will allow you to try the next faster speed (13 wpm  
> when trying for 5 wpm), if you get 1 minute of 5wpm copy (however many  
> characters that is) you pass! In other words it is quite legitimate to get  
> three tries at the test. If you are given this opportunity, it is well  
> worthwhile even if you don't copy a single letter since the real test will  
> sound so much slower after the higher speed.

Just to put this into context:-

That should read:

In other words, it is quite legitimate to get tries a three \*different\* tests.

And just for interest's sake, at a testing session last weekend, one chap  
managed only six questions from the quiz. Checking his written text, we  
found that he had above \*three\* minutes of solid copy, and of course, he  
passed at that speed.

Just one of those things, I guess :-)

--  
Iain Philipps

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Date: Wed, 9 Mar 1994 05:59:42 GMT  
From: news.Hawaii.Edu!uhunix3.uhcc.Hawaii.Edu!jherman@ames.arpa  
To: info-hams@ucsd.edu

References <1994Feb23.113305.7405@hemlock.cray.com>, <CMC9EB.Kr1@news.Hawaii.Edu>,  
<CMCruE.8n6@ucdavis.edu>  
Subject : Re: Sound Blaster stupidity

In article <CMCruE.8n6@ucdavis.edu> ez006683@chip.ucdavis.edu (Daniel D. Todd) writes:

>Jeffrey Herman (jherman@uhunix3.uhcc.Hawaii.Edu) wrote:

>

>: But keep in mind that they're NOT ads because the item is not for sale

>: yet (even though the price was posted for us).

>I've seen this argument posited before, I'm not sure if it's real or  
>not. Anyone who thinks that the non-existence of a product means that  
>ads for it are not advertisements should look at the last couple months  
>of QST. Lots of companies advertise before the product is actually  
>available. (Sorta like President Clinton and the health care program)

>

>

>cheers,

>Dan

Dan - Whatcha doing over here on .misc? I guess I should have inserted  
a `` :) '' in the above hamblister comment, for I've complained a  
couple of times about their passing of 'progress reports' as ads. One  
of the h.b. folks blasted me for saying they were ads since ``... it  
still isn't for sale yet so how could it possibly be an ad?''

73,

Jeff NH6IL

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Date: Tue, 8 Mar 1994 22:44:46 GMT

From: ihnp4.ucsd.edu!news.acns.nwu.edu!ftpbox!mothost!schbbs!NewsWatcher!  
user@network.ucsd.edu

To: info-hams@ucsd.edu

References <CM5ro5.As4@cbnewsm.cb.att.com>, <2lfg43\$pek@jericho.mc.com>,  
<2lhvv2\$boc@slinky.cs.nyu.edu>

Subject : Re: Testing Procedures (was: Re: Keyboards at testing sessions)

In article <2lhvv2\$boc@slinky.cs.nyu.edu>, jackson@longlast.cs.nyu.edu  
(Steven Jackson) wrote:

> |> Once he gets the multiple choice test sheet, I feel that the

> |> candidate should not be allowed to submit his sheet for 1

> |> minute copy.

>

> Now, I'm just studying at this point, but I thought the standard testing  
> procedures, if there are any, shows that an applicant attempts to answer  
> 10 questions. If they get less than 7 correct, then the tester looks at  
> the copy sheet to look for solid copy. Maybe we are in the same boat with

> my guess that back-filling should go on before the test sheet is given.

The actual procedure used is up to the VE team running the session. The only requirement is that the candidate pass if \*either\* 1 minute copy or 7 questions are achieved.

Note that many VE teams will allow you to try the next faster speed (13 wpm when trying for 5 wpm), if you get 1 minute of 5wpm copy (however many characters that is) you pass! In other words it is quite legitimate to get three tries at the test. If you are given this opportunity, it is well worthwhile even if you don't copy a single letter since the real test will sound so much slower after the higher speed.

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Phooey on it all - I'm going sailing for a year or two!!!

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End of Info-Hams Digest V94 #265

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